

## **IN THE CLAIMS:**

Claim 1 has been amended as follows:

1. (Currently Amended) A luminophore plate comprising:

a substrate;

an auxiliary layer disposed on said substrate, said auxiliary layer having a thickness in a range between 20 and 100µm and being rastered to form a plurality of alternating nubs and trenches; and

a storage luminophore layer applied on said auxiliary layer, said storage luminophore layer comprising luminophore needles of a storage luminophore formed on the respective nubs of said auxiliary layer by vapor deposition.

2. (Original) A luminophore plate as claimed in claim 1 wherein each of said nubs has a plurality of said luminophore needles formed thereon.

Claim 3 has been cancelled.

3. (Cancelled)

Claim 4 has been amended as follows:

4. (Currently Amended) A luminophore plate ~~as claimed in claim 1~~ wherein comprising:

a substrate;

an auxiliary layer disposed on said substrate, said auxiliary layer being rastered to form a plurality of alternating nubs and trenches;

a storage luminophore layer applied on said auxiliary layer, said storage luminophore layer comprising luminophore needles of a storage

luminophore formed on the respective nubs of said auxiliary layer by vapor deposition; and

said auxiliary layer is being composed of a material having a coefficient of thermal expansion in a range between  $2.5 \times 10^{-5}/^{\circ}\text{C}$  and  $4.7 \times 10^{-5}/^{\circ}\text{C}$ .

5. (Original) A luminophore plate as claimed in claim 1 wherein said auxiliary layer is rastered with a grid dimension defined by said nubs and trenches in a range between 10 and 100  $\mu\text{m}$ .

6. (Original) A luminophore plate as claimed in claim 5 wherein each of said trenches has a width in range between 2 and 20  $\mu\text{m}$ .

7. (Original) A luminophore plate as claimed in claim 1 wherein said auxiliary layer is composed of a plastic.

Claim 8 has been amended as follows:

8. (Currently Amended) A luminophore plate ~~as claimed in claim 1~~ wherein comprising:

a substrate;

an auxiliary layer disposed on said substrate, said auxiliary layer being rastered to form a plurality of alternating nubs and trenches;

a storage luminophore layer applied on said auxiliary layer, said storage luminophore layer comprising luminophore needles of a storage luminophore formed on the respective nubs of said auxiliary layer by vapor deposition; and

said auxiliary layer is being composed of polyimide having a coefficient of thermal expansion in a range between  $3.1 \times 10^{-5}/^{\circ}\text{C}$  and  $3.5 \times 10^{-5}/^{\circ}\text{C}$ .

9. (Original) A luminophore plate as claimed in claim 1 wherein said auxiliary layer is composed of parylene C.

10. (Original) A luminophore plate as claimed in claim 1 wherein said auxiliary layer is rastered with a grid structure formed by said nubs and trenches that varies over a surface of said auxiliary layer onto which said storage luminophore layer is applied.

11. (Original) A luminophore plate as claimed in claim 1 wherein each of said nubs has a shape of an n-sided polygon.

12. (Original) A luminophore plate as claimed in claim 11 wherein n is between 3 and 6.

13. (Original) A luminophore plate as claimed in claim 1 wherein said auxiliary layer is rastered with a grid structure of said nubs and trenches formed by a plurality of n-sided polygons.

14. (Original) A luminophore plate as claimed in claim 13 wherein n is between 3 and 6.

15. (Original) A luminophore plate as claimed in claim 1 wherein each of said nubs has a shape of an n-sided polygon and wherein said auxiliary layer is rastered in a grid structure of said nubs and trenches formed by a plurality of n-sided polygons.

16. (Original) A luminophore plate as claimed in claim 15 wherein n is between 3 and 6.

Claim 17 has been amended as follows:

17. (Currently Amended) A method for manufacturing a luminophore plate comprising the steps of:

disposing an auxiliary layer on a substrate, said auxiliary layer having an upper surface facing away from said substrate;

rastering said upper surface of said auxiliary layer by forming a plurality of alternating nubs and trenches at said upper surface of said auxiliary layer, with a grid dimension of said nubs and trenches in a range between 20 and 50 $\mu$ ; and

applying a storage luminophore layer onto said upper surface of said auxiliary layer by vapor depositing luminophore needles of a storage luminophore on each of said nubs.

18. (Original) A method as claimed in claim 17 comprising vapor depositing a plurality of said luminophore needles on each of said nubs.

Claims 19 and 20 have been cancelled.

19. (Cancelled)

20. (Cancelled)

Claim 21 has been amended as follows:

21. (Currently Amended) A method as claimed in claim ~~49~~ 17 comprising forming each of said trenches with a width in a range between 2 and 20  $\mu$ m.

22. (Original) A method as claimed in claim 17 comprising rastering said auxiliary layer with grid structure that varies over said upper surface of said auxiliary layer.

23. (Original) A method as claimed in claim 17 comprising forming of said nubs as n-sided polygon.

24. (Original) A method as claimed in claim 23 wherein n is between 3 and 6.

25. (Original) A method as claimed in claim 17 comprising rastering said upper surface of said auxiliary layer with a raster structure comprising a plurality of n-sided polygons.

26. (Original) A method as claimed in claim 25 wherein n is between 3 and 6.

27. (Original) A method as claimed in claim 17 comprising forming of each of said nubs as an n-sided polygon, and rastering said upper surface of said auxiliary layer with a raster structure comprising a plurality of n-sided polygons.

28. (Original) A method as claimed in claim 27 wherein n is between 3 and 6.